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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,423	06/20/2001	Guojun Zhou	042390.P11804	9923

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER

AZAD, ABUL K

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/884,423

**Applicant(s)**

ZHOU, GUOJUN

**Examiner**

ABUL K. AZAD

**Art Unit**

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-14 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) 8, 9, 15-17, 23 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 8, 9, 15-17, 23 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention of Group II, directed to a voice base information retrieval system, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 26, 2004.

2. Applicant's election with traverse of Group I, claims 1-7, 10-14, and 18-22 in the reply filed on August 26, 2004 are acknowledged. The traversal is on the ground(s) as "Applicant disagrees. In fact, claims 16 and 24, which the Examiner indicates are part of Group II, and therefore directed to carrying on a dialog based on the psycho-physical state of the user, include the elements of "receiving input speech data from the user" and "detecting the psycho-physical state of the user from the input speech data." Thus, contrary to the Examiner's reason for restriction, the voice based information retrieval claims of Group II do require detecting the psycho-physical state of the user based on the speech from the user (as also recited in the claims from Group I). Applicant therefore believes that the search and examination of the entire application can be made without serious burden to the Examiner". This is not found persuasive because Inventions of Group I and Group II are related as combination subcombination as stated in the previous Office Action. The combination as claimed does not require the particulars of the subcombination (details of detecting a psycho-physical state) as claimed because voice base information retrieval does not required particulars of

Art Unit: 2654

detecting psycho-physical state of user based on the speech from the user. The subcombination has separate utility such as detecting psycho-physical state of user based on the speech from the user and carryon a dialog based on the psycho-physical state of the user and the combination has separate utility as voice base information retrieval system.

The requirement is still deemed proper and is therefore made FINAL.

3. This application contains claims 8, 9, 15, 16, 17, 23 and 24 drawn to an invention nonelected with traverse filed on August 26, 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 10-14 and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Surace et al. (US 6,144,938).

As per claim 1, Surace teaches, “a system comprising”:

“a psycho-physical state detection psycho-physical state of a user based on the speech from the user” (col. 6, lines 23-63); and

“a spoken dialogue mechanism for carrying on a dialogue with said user based on the psycho-physical state of the user, detected by the psycho-physical detection mechanism from the speech from the user” (col. 5, lines 25-38).

As per claim 2, Surace teaches, “a speech understanding mechanism for understanding the speech from the user based on the psycho-physical state of the user to generate a literal meaning of the speech” (col. 12, line 42 to col. 13, line 20); and

“a voice response generation mechanism for generating a voice response to the user based on the literal meaning of the speech and the psycho-physical state of the user” (col. 12, line 42 to col. 13, line 20).

As per claim 3, Surace teaches, “at least one acoustic model for characterizing the acoustic properties of speech, each of said at least one acoustic model corresponding to some distinct characteristic related to a psycho-physical state of a speaker” (col. 7, line 62 to col. 8, line 23);

“an acoustic model selection mechanism for selecting an acoustic model that is appropriate to according to the psycho-physical state detected by psycho-physical state detection mechanism” (col. 8, lines 26-50);

“a speech recognizer for generating a transcription of spoken words recognized from the speech using the acoustic model selected by the acoustic model selection mechanism” (col. 8, lines 8-23); and

“a language understanding mechanism for interpreting the literal meaning of the speech based on the transcription” (col. 8, lines 8-23).

As per claim 4, Surace teaches, “a natural language response generator for generating a response based on an understanding of the transcription said response being generated appropriately according to the psycho-physical state of the user” (col. 8, lines 24-50);

“a prosodic pattern determining mechanism for determining the prosodic pattern to be applied to said response that is considered as appropriate according to the psycho- physical state” (col. 21, lines 1-11); and

“a text-o-speech engine for synthesizing the voice response based on said response and said prosodic pattern” (col. 8, lines 24-50).

As per claim 5, Surace teaches, “an acoustic feature extractor for extracting acoustic features from input speech data to generate at least one acoustic feature” (col. 7, line 62 to col. 8, line 7); and

“a psycho-physical state classifier for classifying the input speech data into one or more psycho-physical states based on said at least one acoustic feature” (col. 5, lines 11-38).

As per claim 6, Surace teaches, “at least one psycho-physical state model, each of said at least one psycho-physical state model corresponding to a single psycho-physical state and characterizing the acoustic properties of the single psycho-physical state” (col. 5, lines 11-38); and

"an off-line training mechanism for establishing said at least one psycho-physical model based on labeled training speech data" (col. 5, lines 39-67).

As per claim 7, Surace teaches, "a dialogue manager that control the dialogue flow" (Fig. 9, element 924).

As per claims 10-14 and 18-22, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1-7.

#### ***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(703) 305-3838**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(703) 305-9645**.

Any response to this action should be mailed to:

**Commissioner for Patents**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

Or faxed to:

**(703) 872-9314**

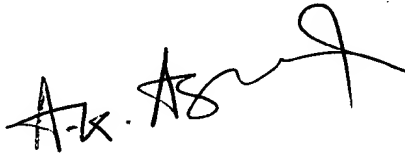
(For informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2654

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center's Customer Service Office at telephone number (703) 306-0377.

Abul K. Azad

A handwritten signature in black ink, appearing to read 'A.K. Azad', with a stylized flourish at the end.

December 9, 2004